

TOWARDS A SHARED MEDITERRANEAN WATER INFORMATION SYSTEM

Jauad EL KHARRAZ, PhD

Euro-Mediterranean Information System on the know-how in the Water sector (EMWIS),
France

Abstract

This project aims at implementing “data, information and statistics on water, based on internationally agreed definitions and methods, structured within information systems, for analysis and decision making” as requested by the UfM Ministerial conference on Water (Jordan, December 2008). Information has been identified as a weak point for many Mediterranean countries regarding their national strategy, especially insufficient knowledge about water abstractions or economic data, or regarding transboundary water resources management. In order to address these issues and to be sure that the deliveries of the project will be used in a sustainable manner, the scope of the project includes all data required for Integrated Water Resources Management Planning and Water Regulation at a river basin or aquifer level or at national and regional level. The objective of project first step for the next 3 years is to create Shared National Water Data Management Systems in 4 pilot countries, to prepare tools for deploying such systems in all the Mediterranean Countries and to set in place an automated reporting mechanism to some regional organizations on a voluntary basis. The extension to other countries or to other topics will be considered in a second step or another project that could be defined on the basis of the results of the current project. Beyond the creation of national systems which will benefit mainly to the pilot countries, all the Mediterranean countries will have the opportunity to take part in regional activities and will benefit from the results of the project first step.

Keywords: Water information systems, transboundary water resources management, sustainable development

Introduction

Facing an increasingly scarcer freshwater resource and an increasing demand, the Mediterranean countries should initiate reforms and significant investment projects for mobilising the resource, transferring water, developing non-conventional resources, controlling pollution, rehabilitating networks, or even modernising irrigation and its management methods, safeguarding and restoring the aquatic ecosystems.

The success of water policies and related investments is conditioned by the implementation of good governance in each country, involving the various stakeholders concerned and being based on a quality follow-up/assessment system, mechanisms for sharing the necessary knowledge, and on increased training on water professions and strengthened research and development actions.

It is obvious that the adapted tools and means necessary for this good governance should be developed or reinforced in each country.

The development of these various national tools - data system, documentation centre, training, research programmes - in the South and Eastern Mediterranean countries attract interest because of the expected benefits in terms of better effectiveness and quality of

operational management, of support to planning and resource allocation, of participative management, follow-up-evaluation of international initiatives, etc.

Most of these countries wish to increase their means in this direction - harmonisation of data and indicators, modernisation of the data gathering systems and organisation of a shared data management, reinforcement of the national focal points of information and documentation, definition of a training strategy, etc.

Helping the national stakeholders concerned with these tools is advisable and most of the countries wish a support to and a harmonisation of the efforts and a consistency of the tools at the regional level.

This working paper deals with lines of thought and proposes to identify the potential contributions of the various existing stakeholders to a better synergy, in relation with the creation of the Mediterranean Union in particular:

- at the level of the EU Mediterranean countries: France, Spain, Italy, Greece, Cyprus, Malta, Slovenia and Portugal;
- at the level of the Mediterranean countries outside the EU: Maghreb, Machrek, Turkey and the Balkans;

at the Mediterranean regional level : EMWIS (Euro-Mediterranean Water Information and Documentation System), the Mediterranean Network of Basin Organisations (MENBO), the Mediterranean component of the European Water Initiative (Med – EUWI), the Mediterranean Water Institute (IME), the Mediterranean Action Plan, etc.

Several structuring « projects » can also provide significant contributions, such as the Monitoring of the transnational programme on local water management « Meda-Water » (RMSU), the SPI-Water project on the transferability of European know-how to Mediterranean third countries and various other tools that can be mobilised for co-operation.

It is quite obvious that the inventory of the Mediterranean resource centres should be pursued with an inclusive and partnership approach.

It is sure that there is, in the Mediterranean countries, a very high potential for organisations having developed abilities and projects that can contribute to the proposed Network, and that it is less a question of creating new bodies than having synergies and better collaboration on common objectives and programmes between these various existing institutions and developing the means they have for a coordinated and joint approach.

Mediterranean Water Information

The Mediterranean documentation exchange system is already made up thanks to the Euro-Mediterranean Water Information and Documentation System (EMWIS), created at the ministerial Conference of Marseilles. Since more than 10 years, EMWIS has become the main regional tool for the exchange of information and knowledge on water in the Mediterranean Area. It is also an operational tool for co-operation within the Barcelona Process. It aims to:

- Structure the National Focal Points of Information on water in all the Mediterranean Countries.
- Facilitate access to the existing information on know-how in the water field, prioritising the institutions, documentation, training, research and development programmes and data administration, technologies adapted to the Mediterranean characteristics.
- Develop the pooling of useful information and the coherence of the systems.
- Develop common products and to promote the co-operation programmes needed.

At the operational level, the national teams are mobilised in the 22 existing National Focal Points (NFPs) under the respective authority of the Water Directors of the 22 countries of the Partnership.

These National Focal Points work in a network with a Central Technical Unit (EMWIS CTU), which has been financed for 10 years in a tripartite way, by the three Governments of Spain, France and Italy.

Structuring co-operation agreements were signed with the European Environment Agency, the International Network of Basin Organisations, the Mediterranean Component of the European Union Water Initiative, etc.

EMWIS directs topical working groups, in co-ordination with the water departments of the Mediterranean countries, to promote the exchange of institutional and technical know-how and to validate it in pilot projects.

The Water Directors recognized EMWIS success many times and its exemplary approach inspires similar initiatives in other areas of the World: South America, Central America, Sub-Saharan Africa (AWIS).

This EMWIS management body is a good example of operating in a network, which mobilise and develop the stakeholders qualified in their field in each country.

The feasibility study of such a system has been carried out by EMWIS for 30 months, with the support of the International Office for Water, within the mandate given by the Euro-Mediterranean Water Directors at their conference in Rome in November 2005.

In the Mediterranean area, many stakeholders gather data and produce indicators related to this sector in order to follow-up global or regional objectives (Millennium Development Goals; national IWRM plans and efficiency plans, Mediterranean Strategy for Sustainable Development, Horizon 2020) or to orientate and support assistance or co-operation policies (FAO, UNEP, OECD/Eurostat, the World Bank). These stakeholders often act on the basis of sectoral agreements (health, agriculture, statistics, environment, etc) and are encountering problems of access to the water data at the national and local levels.

Great efforts are needed to harmonise the data and indicators, to develop data gathering systems and shared data management. Assistance to the national institutions managing water data is essential.

Significant progress can be made to:

□ more easily identify the existing data and information on the various topics related to water management and to obtain information on the methods used for producing these data;

□ establish common basic data, especially for the calculation of the indicators requested by the regional institutions;

□ solve organisational problems (insufficient or different definitions, lack of an organisation responsible for the production/regular dissemination of synthetic data) which often cause the difficulties of obtaining these indicators.

At country level, the creation or reinforcement of true National Integrated Water Data Systems (NWDS) is the main challenge for defining, implementing and evaluating the policy in this sector. This requires:

- gathering, validating and storing the necessary (physical and socio-economic) data on water resources, their uses and water quality,
- sharing these data between the concerned stakeholders,
- developing relevant and harmonised indicators, internationally accepted, to ensure a follow-up at various degrees of geographical aggregation,
- informing the civil society (users' associations) and allowing it to fully participate in the management of water and of its uses.

The project priority is initially to help the Southern and Eastern countries of the Mediterranean basin to develop their own National Water Data Systems. The development of a regional tool facilitating access to the quantified and harmonised data coming from the national and local levels would give access to reliable and relevant data, which cruelly lack

today at the regional level, to support any policy of integrated water resources management and of risk prevention. Using voluntary contributions of the countries, it would deal with (renewable, non-renewable, non-conventional) water resources; their uses (domestic: water and sanitation utilities; producers: agriculture and industry; and environmental) in terms of demand, loss and efficiency; pressures on the resources and the environment (abstraction, overexploitation, degradation) and with risks (drought, floods, silting of dam reservoirs, shortages). These data could be compared with those related to sustainable development in the Mediterranean area.

The development of such a tool, taking into account both the needs of the international initiatives and the field reality of IWRM, would allow:

- having quality basic data so that the national and international institutions can follow-up their strategy in the water sector,
- better coherence of the indicators produced by various organisations,
- greater effectiveness of the assistance to the implementation of harmonised national water information systems,
- promoting South/South transfers of good practices and stimulating the countries, thanks to the comparison of results,
- contributing to the consistency of regional policies (e.g. UNEP Mediterranean Action Plan and Euro-Mediterranean Partnership with the European Neighbourhood Policy),
- having an essential component both for a regional environmental information system and for a global information mechanism on water and sanitation.

EMWIS, which carried out this feasibility study on the development of a regional water information (observation) mechanism in the Mediterranean area, with IOWater's technical support, has all necessary competences to coordinate this mechanism. It already has, as reminded above, an adapted governance, a technical co-ordination body, agreements with various regional organisations (European Environment Agency, Med-EUWI, World Water Council, International and Mediterranean Networks of Basin Organisations, UNEP/MAP, International Office for Water, SOGESID, CEDEX, etc.) and a suited geographic coverage (Euro-Med countries, the Balkans and Libya).

This implies, in a first step, to officials the extension of EMWIS field of action to the management of data (quantified information) on water resources and their uses (the initially targeted field being that of information on know-how).

Conclusion

The importance of gathering water information based on reliable data is vital and this information should to be made available to the general public to be developed, where possible, upon existing national, regional and international initiatives.

The efforts aimed to improve the knowledge on water should be directed to:

- ☐ Assess and monitor water resources and demands for both human activities and the environment, taking into consideration all waters, including transboundary resources.
- ☐ Promote comparable water data collection and monitoring (indicators, data collection systems).
- ☐ Elaborate a water status diagnose in the each country
- ☐ Fostering the development of Shared National Water Information Systems based on internationally agreed definitions and methods to support Integrated Water Resources Management and to contribute to the definition, implementation and follow-up of the Strategy.

References:

EMWIS, the League of Arab States & the Lebanese Ministry of Energy and Water (2013), project proposal submitted to the UfM Secretariat.

Créative Technologies (2008) Maroc: étude de diagnostique sur la faisabilité d'un Mécanisme méditerranéen d'observation sur l'eau

<http://www.emwis.net/documents/emwis-main-studies/medwip/Maroc-FR-200801.pdf>

Paul Haener (2008), Feasibility study on the development of a regional water observation mechanism in the Mediterranean region

<http://www.emwis.net/documents/emwis-main-studies/medwip/MEDWIP2-final-EN.pdf>

InterSus Sustainability Services (2006) Regional/international level: Diagnostic study for the feasibility study on the development of a regional observation mechanism for water in the Mediterranean region

http://www.emwis.net/documents/emwis-main-studies/medwip/Rapport-Obs_Med-INT-final.pdf